

-35-  
CLAIMS

1. A method for identifying a substance capable of disrupting microtubule organising centre (MTOC) integrity, which method comprises  
contacting an Asp polypeptide or homologue thereof, or fragment thereof capable of forming and/or maintaining MTOCs in the absence of the substance, with a candidate substance in the presence of components required for MTOC formation and microtubule nucleation therefrom, and determining whether the substance disrupts MTOC integrity.
2. A method according to claim 1 wherein said components comprise KI-extracted centrosomes and an Asp-depleted soluble cellular extract.
3. A method according to claim 1 wherein said components comprise a partially purified centrosome preparation and tubulin.
4. A method according to any one of claims 1 to 3 wherein said Asp polypeptide is as shown in SEQ I.D. No. 1 or a fragment or derivative thereof capable of stimulating the formation of and/or maintaining MTOCs.
5. A method according to any one of claims 1 to 3 wherein said Asp polypeptide is a mammalian homologue of the polypeptide shown in SEQ I.D. No. 1, or a fragment or derivative thereof capable of stimulating the formation of and/or maintaining MTOCs
6. A method according to any one of claims 1 to 5 further comprising administering a said substance, which has been determined to disrupt MTOC integrity, to a cell and determining whether the substance inhibits mitosis in the cell.
7. A substance identified by the method of any one of claims 1 to 6.
8. A substance capable of binding to an Asp polypeptide or homologue or fragment thereof for use in a method of disrupting MTOC integrity.

-36-

9. A substance according to claim 8 which is an antibody.
10. A polypeptide fragment of an Asp polypeptide or homologue thereof, which fragment is not capable of restoring microtubule nucleation centre organising activity to an Asp-depleted extract, for use in a method of disrupting MTOC integrity.
11. A polynucleotide encoding a polypeptide according to claim 10 for use in disrupting MTOC integrity.
12. A nucleic acid vector comprising a polynucleotide according to claim 11.
13. Use of an Asp polypeptide or homologue thereof, or fragment thereof capable of stimulating formation of and/or maintaining MTOCs, in an assay for identifying a substance capable of disrupting MTOC integrity.
14. A substance according to claim 8 or 9 for use in a method of disrupting MTOC integrity.
15. A process comprising the steps of:
  - (a) performing the method according to any one of claims 1 to 6; and
  - (b) preparing a quantity of those one or more substances identified as being capable of disrupting MTOC integrity.
16. A process comprising the steps of:
  - (a) performing the method according to any one of claims 1 to 6; and
  - (b) preparing a pharmaceutical composition comprising one or more substances identified as being capable of disrupting MTOC integrity.